

CLAIMS

What is claimed is:

1. A trailer slider comprising:

an actuation member for changing the position of a pair of locking pins, and driving the locking pins between a non-engaged and an engaged position;

a feedback member moving with said actuation member, said feedback member being in an expected position in said engaged position of said locking pins; and

said feedback member communicating a position of said locking pins to an interlock valve, said interlock valve measuring a parking brake associated with a trailer carrying said slider is in a park position if said feedback member is not in said expected position; and

said trailer also being provided with a spring brake control valve and a compressed air reservoir, said interlock valve being positioned on a pressurized air supply line downstream of said spring brake control valve and said reservoir.

2. A slider as set forth in Claim 1, wherein said actuation member drives a torque tube which is turned to move said locking pins between said non-engaged and said engaged positions.

3. A slider as set forth in Claim 2, wherein said feedback member is a lever that rotates with said torque tube, said lever in turn moving a transmission member, said transmission member driving said interlock valve between a flow blocking position and a flow position, said interlock valve venting pressurized air from a parking brake in said blocking position.

4. A slider as set forth in Claim 1, wherein said actuation member is a pneumatic control.
5. A slider as set forth in Claim 1, wherein said actuation member is a mechanical element.
6. A slider as set forth in Claim 1, wherein a warning is sent to a vehicle operator when said interlock valve is blocking release of the parking brake.
7. A slider as set forth in Claim 1, wherein a parking brake control valve is positioned to receive pressurized air from said pressurized air supply line, and deliver pressurized air to said reservoir, or to said parking brakes, and through said interlock valve.

8. A vehicle trailer system comprising:

at least one parking brake, said at least one parking brake being moved between a park and release position by a flow of pressurized air;

a vehicle slider having at least a pair of locking pins, said locking pins being movable by an actuation member between engaged and non-engaged positions;

a trailer frame rail comprising a plurality of incrementally spaced holes, said locking pins moved into selected ones of said holes in said engaged position;

an interlock valve being movable between a flow blocking position when said locking pins are in said non-engaged position, and a flow position when said locking pins are in said engaged position, said flow blocking position preventing the flow of pressurized air to said parking brake and preventing release of said parking brake if said locking pins are not in said engaged position; and

said trailer further carrying an air reservoir and a pressurized air supply line communicating to said reservoir, said interlock valve being positioned in an air supply line leading to said parking brake, and downstream of said reservoir.

9. A vehicle trailer system as set forth in Claim 8, wherein said locking pins are movable under pneumatic control.

10. A vehicle trailer system as set forth in Claim 7, wherein said locking pins are movable under the control of a mechanical actuation element.

11. A vehicle trailer system as set forth in Claim 8, wherein a parking brake control valve is positioned between said interlock valve and said reservoir, said parking control valve also communicating with said pressurized air supply line, said parking brake control valve selectively communicating pressurized air to said parking brake, or to said reservoir, and said interlock valve being positioned on a line communicating said parking brake control valve to said parking brake.